

LDMOS Device with Isolation Guard Rings

ABSTRACT OF THE DISCLOSURE

A method of forming a LDMOS semiconductor device and structure for same. A preferred embodiment comprises forming a first guard ring around and proximate the drain of a LDMOS device, and forming a second guard ring around the first guard ring. The first guard ring comprises a P+ base guard ring, and the second guard ring comprises an N+ collector guard ring formed in a deep N-well, in one embodiment. The first guard ring and second guard ring prevent leakage current from flowing from the drain of the LDMOS device to the substrate.